



Material Safety Data Sheet

PERMANONE® 10% EC

MSDS Number: 122

MSDS Version 1.2

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name PERMANONE® 10% EC
Chemical Name Mixture; active ingredient, permethrin
Synonym
MSDS Number 122
Chemical Family
Chemical Formulation
EPA Registration No. 432-1132
Canadian Registrat. No.

Aventis
95 Chestnut Ridge Road
Montvale, NJ 07645
USA

For Product Use Information: (800)331-2867 Monday through Friday
8:00AM-4:30PM
For Medical Emergency contact DART: (800) 334-7577 24 Hours/Day
For Transportation Emergency CHEMTREC: (800) 424-9300 24 Hours/Day

Product Use Description Permanone 10% E.C. is a broad spectrum multi-use insecticide recommended for agricultural and commercial use. It has been specially formulated for use as an adulticide for Public Health Programs.

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component Name</u>	<u>CAS No.</u>	<u>Concentration % by Weight</u>	
		<u>Minimum</u>	<u>Maximum</u>
Permethrin	52645-53-1	10.0000	
Other ingredients, including:	0-08-8	90.0000	
Isoparaffinic Petroleum Solvent	64742-47-8	> 80.0000	

SECTION 3. HAZARDS IDENTIFICATION

NOTE: Please refer to Section 11 for detailed toxicological information.

Emergency Overview

A medium amber to light brown liquid with a very mild odor that:
Causes skin irritation and moderate eye injury.
Harmful if inhaled.
Prolonged or frequently repeated contact may cause allergic reactions in some individuals.
This product is highly toxic to fish and bees.

Physical State liquid
Odor Very mild.
Appearance Medium amber to light brown liquid.

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Routes of Exposure	Inhalation, eye and skin contact.
Immediate Effects	
Eye	Causes moderate eye injury.
Skin	Causes skin irritation. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.
Inhalation	Harmful if inhaled.
Chronic or Delayed Long-Term	See Section 11 for carcinogenic/oncogenic information on permethrin.

SECTION 4. FIRST AID MEASURES

Eye	Flush eyes with plenty of water. Call a physician if irritation persists.
Skin	Wash with plenty of soap and water. Get medical attention if irritation persists.
Ingestion	Contact a Physician or Poison Control Center immediately. Drink promptly a large quantity of skimmed milk, egg whites or gelatin solution, or if these are not available, large quantities of water. Avoid alcohol. Do not induce vomiting unless under a physician's care. This product contains petroleum distillate. Vomiting may cause aspiration pneumonia.
Inhalation	Remove person to fresh air. Apply artificial respiration if indicated. Get medical attention.
Note to Physician	Do not administer or instill milk, cream or other substances containing vegetable or animal fats which enhance absorption of lipophilic substances.

SECTION 5. FIRE FIGHTING MEASURES

Flash Point	69 °C / 156 °F TCC
Fire and Explosion Hazards	Do not use or store near heat or open flame. Do not use this product in or on electrical equipment due to the possibility of shock hazard.
Suitable Extinguishing Media	Carbon dioxide, dry chemical, foam or water.
Fire Fighting Instructions	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH approved (or equivalent) and full protective gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES

General and Disposal	Soak up with an absorbent material such as sand, sawdust, earth, fuller's earth, etc. Dispose of with chemical waste.
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SECTION 7. HANDLING AND STORAGE

Handling Procedures	- Do not get on skin or on clothing.
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- Avoid breathing vapor or spray mist and contact with eyes.
- Do not use near heat or open flame.
- Do not use this product in or on electrical equipment.
- See Section 8 for proper personal protective equipment requirements.

Storing Procedures

- Do not contaminate water, food or feed by storage.
- Store upright at room temperature.
- Avoid exposure to extreme temperatures.
- Do not store near heat or open flame.

Work/Hygienic Procedures

- Wash thoroughly with soap and water after handling.
- Remove contaminated clothing and wash before reuse.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye/Face Protection	Safety glasses or goggles.
Body Protection	Impervious gloves.
Respiratory Protection	Wear full-faced gas mask with canister type recommended for general insecticide protection for applying indoors as a space spray or fog.
Exposure Limits	None Established

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Medium amber to light brown liquid.
Physical State	liquid
Odor	Very mild.
pH	neutral
Vapor Pressure	< 1 mmHg at 25 °C
Vapor Density (air = 1)	> 5
Specific Gravity	0.84 at 20 °C
Bulk Density	7.0 lb/gal
Boiling Point	N/A
Melting/Freezing Point	N/A
Solubility (in water)	emulsifiable

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Viscosity 2.25 cS
20 °C

Other Information PERCENT VOLATILES: 81
EVAPORATION RATE: < 0.1 (N-Butyl acetate = 1)

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability Stable

Incompatibility Strong oxidizers.

Hazardous Polymerization (Conditions to avoid) Will not occur

SECTION 11. TOXICOLOGICAL INFORMATION

Acute Oral Toxicity (Rat) LD50 > 5,000 mg/kg
Practically non-toxic

Acute Dermal Toxicity (Rabbit): LD50 > 5,050 mg/kg
Practically non-toxic

Acute Inhalation Toxicity 4-Hour LC50 (Rat) > 1.56 mg/L (max attainable concentration)
Slightly toxic

Skin Irritation (Rabbit): Moderately irritating @ 72 hrs; PDII = 4.2

Eye Irritation (Rabbit) Moderately irritating

Sensitization (Guinea pig): Not a sensitizer

THE ABOVE ACUTE DATA WERE DEVELOPED WITH: Permanone 10% E.C.

THE FOLLOWING DATA WERE DEVELOPED WITH: permethrin, the active ingredient

Chronic Toxicity A statistically significant increase in the incidence of lung and liver tumors was observed in female mice receiving diets containing 375 and 750 mg/kg/day of permethrin technical over 85 weeks.

Assessment Carcinogenicity

ACGIH

None

NTP

None

IARC

Permethrin

52645-53-1

Isoparaffinic Petroleum Solvent

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OSHA

None

Teratogenicity Permethrin was not teratogenic when tested in rats.

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Mutagenicity

Permethrin did not produce any mutagenic effects when tested in the Ames test.

SECTION 12. ECOLOGICAL INFORMATION

Environmental Precautions

This product is highly toxic to fish. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply where runoff is likely to occur. Do not apply when wind speeds exceed 10 mph. Do not contaminate water when disposing of equipment washwaters. Shrimp and crab may be killed if application rates recommended on the label are exceeded. Use with caution where these are important resources.

This pesticide is highly toxic to bees exposed to direct treatment or to residues remaining on the treated area. Do not apply this product or allow drift when bees are actively visiting the treatment area. Applications should be timed to provide the maximum possible interval between treatment and the next period of bee activity.

SECTION 13. DISPOSAL CONSIDERATIONS

General Disposal Guidance

Do not contaminate water, food or feed by disposal.

Pesticide Disposal: Pesticide, spray mixture or rinse water that cannot be used according to label instructions must be disposed of at or by an approved waste disposal facility.

Container Disposal

One Gallon and Smaller: Do not reuse container. Wrap container in several layers of newspaper and discard in trash.

Container Disposal Larger Than One Gallon:

Metal Containers - Triple rinse or equivalent. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

Plastic Containers - Triple rinse or equivalent, then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Glass Containers - Triple rinse or equivalent, then dispose of in a sanitary landfill or by other approved state and local procedures.

RCRA CLASSIFICATION:

RCRA HAZARDOUS WASTE INGREDIENT: None.

SECTION 14. TRANSPORT INFORMATION

PROPER SHIPPING NAME: Pesticides, liquid, toxic, n.o.s. (Permethrin), 6.1, UN2902, PG III, *

*State the net volume

DOT SHIPPING LABEL: Keep Away From Foodstuffs

NOTE: For transport purposes (49 CFR Part 173.132), the calculated 1-Hour LC50 (Rat) is > 6.24 mg/l.

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SECTION 15. REGULATORY INFORMATION

US Federal

EPA Registration No.	432-1132	
TSCA list		
Isoparaffinic Petroleum Solvent	64742-47-8	
TSCA 12b export notification		
None		
SARA Title III - section 302 - notification and information		
None		
SARA Title III - section 313 - toxic chemical release reporting		
Permethrin	52645-53-1	1.0%

US States Regulatory

CA Prop65

This product contains a chemical known to the state of California to cause cancer.

None

This product contains a chemical known to the state of California to cause birth defects or other reproductive harm.

None

US State right-to-know ingredients

Permethrin	52645-53-1	NJ
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Canadian Regulations

Canadian Registrat. No.

Canadian Domestic Substance List

Isoparaffinic Petroleum Solvent	64742-47-8
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Environmental

CERCLA

None

Clean Water Section 307 Priority Pollutants

None

Safe Drinking Water Act Maximum Contaminant Levels

None

International Regulations

EU Classification

None

European Inventory of Existing Commercial Substances (EINECS)

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SECTION 16. OTHER INFORMATION

	Health	Flammability	Reactivity	Others
HMIS	1	2	0	E
NFPA	1	2	0	

REVISED SECTIONS:

MSDS REVISION INDICATOR: New Format and Change to Product Name.

PREPARED BY: Regulatory Department

PHONE: 800-438-5837

SUPERCEDES MSDS DATED: 05/19/2000

Print Date: 10/05/2001

Supersedes MSDS, which is older than: 10/05/2001

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